

(No Model.)

J. S. LEAVITT.

TOOL FOR CHANNELING BOOT OR SHOE SOLES.

No. 331,145.

Patented Nov. 24, 1885.

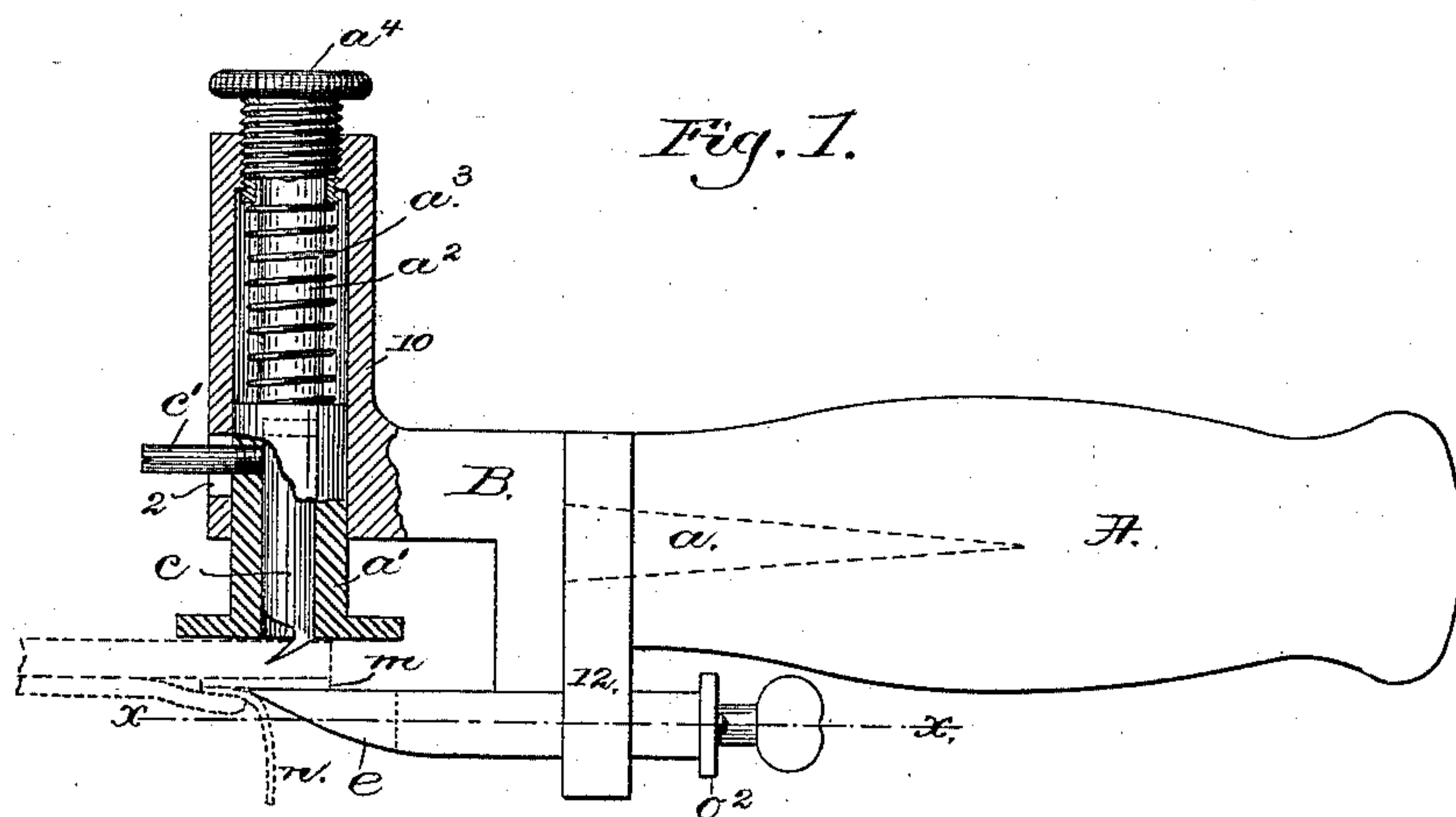
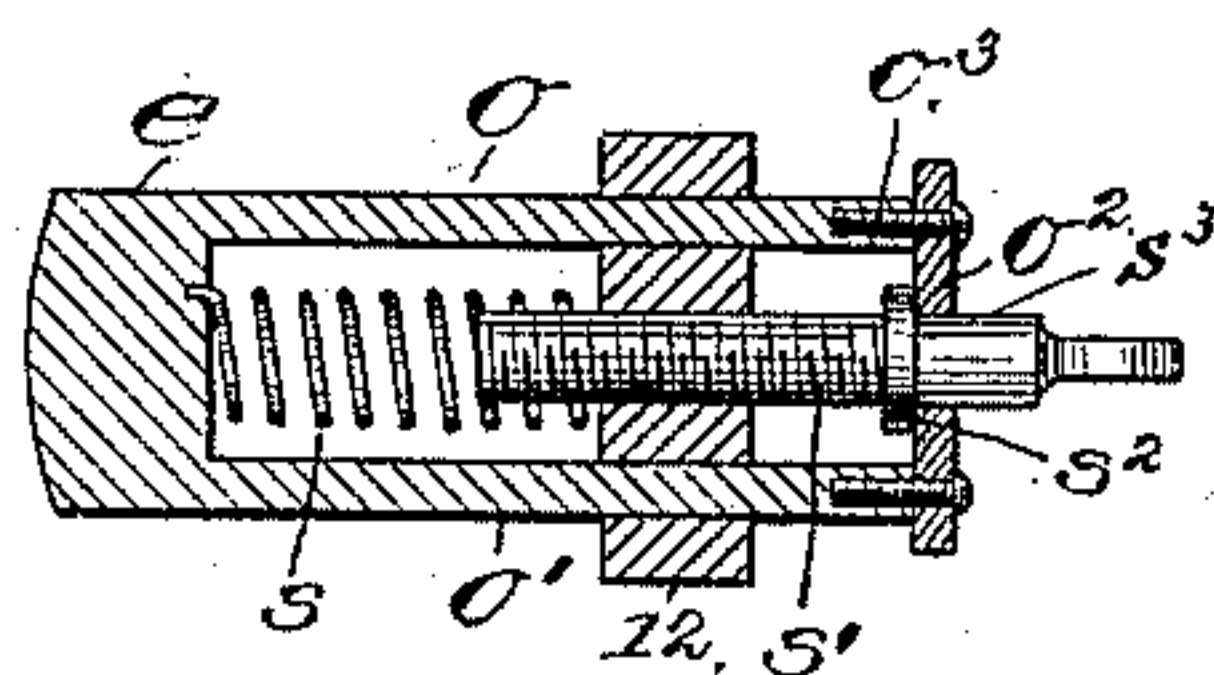


Fig. 2.



Witnesses.

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TOOL FOR CHANNELING BOOT OR SHOE SOLES.

SPECIFICATION forming part of Letters Patent No. 331,145, dated November 24, 1885.

Application filed July 27, 1885. Serial No. 172,720. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. LEAVITT, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Tools for Channeling Boot or Shoe Soles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to produce a small hand tool or device for channeling and grooving soles of boots and shoes, preferably after the same have been tacked or otherwise secured upon the lasted boot or shoe and the
15 welt interposed in the usual manner.

The invention consists, essentially, of a tool containing a hand-piece and a frame or head rigidly connected therewith, combined with an adjustable spring-controlled or yielding cutter-carrying block provided with a cutter and mounted in the said head, and an adjustable spring-controlled or yielding guide, also mounted in the said head, and arranged to bear against the surface of the projecting edge of the
20 welt or sole and against the upper of the boot or shoe drawn over the last, as will be described.

The tool herein to be described is a modification of that shown and described in application, Serial No. 172,307, filed July 22, 1885; but instead of employing both hands to operate it, one only is employed, and herein nothing
30 shown in the said application is claimed.

Figure 1 shows in elevation and partial section a tool embodying my invention, and Fig. 2 a section of Fig. 1 below the dotted line $x-x$.

The head B, provided with a tang, a , has applied to it a hand-piece, A. The cutter-carrying block a' and its attached spindle a^2 are fitted to slide in a vertically-bored portion, 10, of the frame or head B. The spindle a^2 is surrounded by a spiral spring, a^3 , one end of which bears against the top of the cutter-carrying block, while its other end bears against an adjusting-nut, a^4 , screwed into the end of the portion 10 of the frame, rotation of the
40 said adjusting-nut increasing or decreasing the tension of the spring a^3 . The channel-cutter c is adjustably held in the block a' by a set-screw, c' , which latter passes through a slot, 2, in the portion 10 of the frame and into the block a' , the screw c' serving as a thumb-piece by which to raise the cutter-carrying

block a' . The guide e , mounted in a projecting portion, 12, of the frame or head B, has a bearing face and edge adapted to bear against the welt m , and enters the space between the welt and the upper n , drawn over the last. This guide e (best shown in section, Fig. 2) is recessed or cut away to present forked arms $o o'$, which, passed through the projecting portion 12 of the frame or head B, are joined at their ends by a cross-piece, o^2 , secured thereto by suitable screws, o^3 . Located between the forked arms $o o'$ is a spiral spring, s , one end of which bears against the guide e , while the
60 other end bears against the projecting portion 12 of the frame, the tendency of the spring being to force the guide e forward against the boot or shoe.

The guide e is held in suitable position relative to the boot or shoe, and the spring s slightly compressed by an adjusting-screw, s' , which passes through the cross-piece o^2 , and through or into the projecting portion 12 of the frame, the cross-piece normally bearing
75 against a flange or collar, s^2 , integral with the shank of the screw s' , by the action of the spring s , and moving freely on the unthreaded portion s^3 of the adjusting-screw when the spring s is further compressed.

As the guide e is pressed against the boot or shoe, it is free to yield, as necessity may require, against the tension of the spring s , the forked arms $o o'$ and connected cross-piece o^2 moving freely and independently. Rotation of the screw s' in one direction, the flange s^2 bearing against the cross-piece, moves the guide
85 e toward the projection 12, while in the opposite direction, in co-operation with the normal action of the spring s , the said guide is permitted to move away from the projection 12. To apply the tool to a boot or shoe, the thumb-piece or set-screw c' is raised to permit the channel-cutter to pass over the edge of the sole and the guide e to rest against the upper
95 and upon the welt. The thumb-piece is then released and the tool moved around the edge of the sole, cutting the channel therein.

It is obvious that a groover may be employed instead of the channel-cutter, or both a channel-cutter and groover may be employed, or a marker, if desired, without departing from my invention.

I claim—

1. In a tool for channeling the soles of boots and shoes, the hand-piece and connected frame or head B, the cutter-carrying block, and channel-cutter therein, combined with a yielding adjustable guide and the adjusting-screw s' , to secure the adjustability of said guide, substantially as described.

2. In a tool for channeling the soles of boots and shoes, the hand-piece and frame or head B, the cutter-carrying block and its attached spindle a^2 , spring a^3 , and adjusting-nut a^4 , cutter c , and set-screw c' , combined with a yielding guide having a smooth bearing face and edge, and mounted in the frame or head at right angles to the axis of the cutter-carrying block, substantially as described.

3. In a tool for channeling the soles of boots and shoes, the hand-piece and frame or head

B, combined with a yielding guide consisting of a bearing-face, forked arms o o' , cross-piece o^2 , and spring s , substantially as described.

4. In a tool for channeling the soles of boots and shoes, the hand-piece and frame or head B, combined with an adjustable yielding guide to bear against the upper and upon the welt, the said guide consisting of forked arms o o' , cross-piece o^2 , spring s , and adjusting-screw s' , having flange s^2 and unthreaded portion s^3 , substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN S. LEAVITT.

Witnesses:

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